

Advisory Committee on Facilitating Geospatial Data Sharing

Notes of initial meeting, February 22, 2002

Attendees:

Steve Schafer, Chair	CIO – DAS	slschafe@notes.state.ne.us
Gayle Starr	Nebr. Dept. of Natural Resources	gstarr@dnr.state.ne.us
Tom Lamberson	Nebr. Dept. of Envir. Quality	Tom.Lamberson@ndeq.state.ne.us
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Mark Kuzila	Cons. and Survey Div.-UNL	mkuzila1@unl.edu
Dan Hiller	Nebr. Emer. Mgmt. Agency	dan.hiller@nema.state.ne.us
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Dave Hattan	IMServices – DAS	dhattan@notes.state.ne.us
Mitch McCartney	Clerk of the Legislature	mmccartney@unicam.state.ne.us
Tracy Bicknell-Holmes	UNL – Library Services	tbicknel@unlnotes.unl.edu
Steve Peaslee	NRCS – USDA	steve.peaslee@ne.usda.gov
Sonja Sebree	USGS – Water Division	sksebree@usgs.gov
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Mike Thompson	Nebr. Dept. of Natural Resources	mthompson@dnr.state.ne.us
Kim Menke	Nebr. Dept. of Natural Resources	kmenke@dnr.state.ne.us
Larry Zink	GIS Steering Committee	lzink@notes.state.ne.us

Steve Schafer informed the group that he had been asked to chair this initial meeting of the Advisory Committee, but that the agenda was open for others to volunteer for the chair role, or for the group to nominate and select another chair. Gayle Starr indicated that he felt Steve was an excellent choice to chair the group and this was met with general approval and support from the group. Therefore Steve indicated that he was willing to continue in the role of Chair.

Steve Schafer indicated that he and Larry Zink had meet and discussed the issues and drew up a rough proposed agenda for today's meeting. The group supported the agenda proposed by Steve.

Steve also indicated that after his meeting with Larry, he had sorted through the available background material and prepare what he hoped would be a useful overview of the background and the issues to be explored. The following are some of the highlights of Steve's introductory remarks, combined in some cases with related contributions from other committee members.

Reality Check Steve began his background overview by doing a reality check on the constraints that any initiatives in this general area must accommodate.

- Budget Constraints The first of these is the reality of the serious budget constraints that state government is currently facing. Given these budget constraints is highly unlikely that there will be any new general fund money for initiatives this year and probably next year either.
- Staffing Constraints Another significant, and related reality, are the limits on available staffing that all state agencies are currently facing.
- Agency-driven priorities Finally Steve noted that while all the agencies around the table are sympathetic and supportive of the need for interagency collaboration and cooperation, each agency must give first priority to those programs and initiatives directly related to their agency's mission and priorities.

Background Issues Steve also provided a brief overview of some of the background issues that lead to the formation of this Advisory Committee.

- Status of GIS Clearinghouse. Steve noted that there are currently at least two state-operated geospatial data clearinghouses in Nebraska. One is hosted by Nebraska Online on behalf of the GIS Steering Committee and one is hosted by the Dept. of Natural Resources. The clearinghouse hosted by DNR has metadata for only those natural resources-related datasets hosted by the DNR Databank. The more general clearinghouse sponsored by the GIS Steering Committee, as only a few of the numerous Nebraska-related geospatial databases listed that are currently available. This Steering Committee Clearinghouse suffers from the lack of staff support and from the lack of support from state agencies in developing and then listing metadata about their available datasets.
- Access to GIS expertise. There is a generally recognized need to have available additional GIS expertise for state agencies. At the current time, GIS expertise is limited to a small number of state agencies and if other agencies wish to explore GIS applications the start up hurdles are quite high. There is also a problem when key GIS staff members leave an agency and the agency is then left with a critical short-term expertise gap.
- NEMA's experience. The recent experience of the Nebraska Emergency Management Agency highlighted several problems, as it attempted to apply GIS capability to the challenge of rapidly identifying critical infrastructure in need of protection. The lack of central point of contact for GIS data meant that a considerable amount of time and resources were required to find out what data was available, who had it, and getting collected and modified into a form that would meet NEMA's needs. The absence of staff support for a general state GIS data center meant that a considerable amount of time was required by NEMA and several other agency's personnel to identify NEMA's needs, help manage the various datasets, and provide technical assistance to get NEMA up and running.
- Requests for single point of contact for GIS data. The NEMA experience highlighted the need for a single point of contact for GIS data. But Steve and others noted that this problem or need is limited to NEMA. As we seek to enhance geospatial collaboration among state, local, federal and private entities through initiatives such as the I-Teams this single point of contact becomes increasingly important to federal, state, local and private entities so that they can efficiently find and access this common spatial data infrastructure.
- Internet Mapping Group's recommendation for a "data access support center". In addition to making recommendations for data standards and guidelines, this Internet Mapping Advisory Committee also recommended that a Nebraska geospatial data access and support center should be developed. This recommendation was based on the efficiencies that could be gained by maintaining at least several of key geospatial datasets in one place, in an online, interactive format, so that multiple agencies could access those datasets as part of their interactive mapping applications. The Adv. Cmte. also noted that developing and maintaining interactive GIS mapping applications require specialized skills, some of which are in addition to traditional GIS skills. The development and retention of personnel with these specialized skills in a data access and support center was thought to be an efficient means of providing those technical skills to the broader GIS user community.
- GIS Steering Committee Strategic Plan. Steve noted that the last two GIS Steering Committee Annual Reports and Strategic Plans have noted the deficiencies in this general area. The most recent Strategic Plan called for the convening of an Advisory Committee to explore these needs and to make recommendations.

Goals and Objectives. Steve suggested that the goal of the Advisory Committee's work could be derived from a summary of the key points in the resolution adopted by the GIS Steering Committee authorizing the Advisory Committee.

- Goal. Steve suggested the following goal: "Facilitate easy access, integration, and usability of geospatial data"
- Objectives. Steve also suggested it might be useful to break down the work of the Advisory Committee into two related objectives
 1. Evaluate current arrangements and future options for providing the data clearinghouse
 2. Evaluate current arrangements and future options for GIS support functions, including concept of a data access and support center

Scope of Work. Steve concluded his introductory remarks the following suggested scope of work

- Assess strengths and weaknesses current arrangements;
- Recommend ways to achieve cost-effective solutions, broad use, and highest return on investments;
- Evaluate needs of public and private entities, including those with and without GIS capabilities;
- Recommend structures, standards and processes.

Following Steve's introductory remarks, the committee as a whole discussed his summary and suggestions.

The Current Situation. There was a discussion of the current situation regarding Nebraska clearinghouses. Larry noted that the Nebraska Geospatial Data Clearinghouse, which is currently hosted by Nebraska Online, was originally developed as part of a grant from the FGDC to the Nebraska Library Commission, in partnership with the GIS Steering Committee. As part of that project the clearinghouse software was secured and installed on the servers. A training session was held on metadata development and metadata was developed and listed on the clearinghouse for several databases. Since that time, very few additional databases have been added to this clearinghouse node. The servers for this clearinghouse contain no actual geospatial data, just metadata. This clearinghouse has the capability to link with, and search other FGDC-compatible clearinghouse nodes, including the clearinghouse node hosted by the Nebraska Dept. of Natural Resources (NDNR). The node, currently hosted by Nebraska Online, was originally envisioned to be a comprehensive statewide clearinghouse node, but it has suffered from the beginning from a lack of available staff support, both technical and otherwise, to make this comprehensive clearinghouse vision possible.

The other FGDC-compliant clearinghouse node is hosted by NDNR. Through this clearinghouse node one can search through all the geospatial data maintained by the NDNR Databank. Most of this data is also available online through the Databank servers. This node has many more databases listed and searchable, but they are limited to databases related to natural resources.

The Need. A number of agency representatives spoke to the need for an enhanced clearinghouse/geospatial data access and support center for Nebraska. In general, the assembled group all affirmed the need to enhance the current geospatial clearinghouse. Mark Kuzila said that despite all the obstacles, "we just need to do it". Tracy Bicknell-Holmes characterized the need as access being the issue. She offered that the UNL Library staff could help with the development of metadata, indexing and cataloging. But she also noted that they lacked the GIS technical support capabilities. Mike Thompson noted that the need extends beyond just finding and accessing available geospatial data, but also the need for staff resources to assist the general GIS user community with issues such as data quality, data integration, and the data development to fill critical data gaps.

Clearinghouse and/or Data Access and Support Center – Separate Issues or a Continuum. The discussion turned to whether it was practical to explore the ideas related to a geospatial clearinghouse and/or a data access and support center separately. Following a discussion, the group appeared to agree that this question ultimately seemed to come down to a discussion of where on the continuum of possible services one would/could provide necessary support and that therefore it was probably more practical to discuss it from that perspective.

Larry noted that the theory behind the FGDC Clearinghouse node approach was that, at a bare minimum, one could just have metadata listed and searchable, and within that metadata would either be online links to the actual data or information about how it could be accessed. The practical reality, as can be seen by the Nebraska Geospatial Clearinghouse experience, is that even at this bare bones level there is a need for staff support to work with agencies to identify available geospatial data, help get metadata developed and to get it listed on the clearinghouse. Beyond that one easily starts climbing the ladder of needed/wanted additional services such as integrating separate data sets, putting data into a common mapping projection, maintaining up-to-date clearinghouse software interfaces, technical support for accessing and using the available data, etc., etc.). It was noted that in its recommendation for the development of a Data Access and Support Center, the Advisory Committee on Interactive Mapping had outlined what it saw as a range of potential services that should be reasonably considered for such a center (http://www.calmit.unl.edu/gis/InterMap_DASC_Recomd.pdf).

In the discussion, it was suggested that what was needed was an entity that could provide a mix of services. At a minimum we needed to build and maintain a pretty comprehensive metadata repository and probably also facilitate access to geospatial data through a mix of centralized and decentralized data storage. There was also considerable support for at least some level of technical assistance to assist users in accessing and utilizing the data. Additional GIS user community needs and the potential efficiencies that could be gained from an interagency center that could provide some of those needs were discussed. Among the needs discussed were the following: assisting users with map projections, fielding common data questions, providing internet mapping infrastructure and expertise, helping potential new users with pilot application development assistance, assisting interagency data development efforts, and providing a single point of contact for the growing range of geospatial data users both within and outside the state.

Nebraska Emergency Management Agency Experience. The recent experience of the NEMA was discussed as an example of the range of needs. In the wake of Sept. 11th, NEMA worked to quickly develop a GIS capability and applications related to the identification of critical infrastructure in Nebraska. According to the discussion, a data access and support center could have greatly facilitated this process. NEMA had to talk with numerous entities to identify the various geospatial data sets that were available. They then needed a considerable amount of technical assistance to access and integrate those data sets from a wide range of entities. Problems with quality control, map projections, and geo-coding facilities were some of the issues discussed. It was noted that while many of those issues have been resolved for the short-term, long-term questions remain relative to how NEMA will maintain easy and quick access to current data from multiple agencies and how key data gaps such as street address databases will be met.

Other Issues Raised. It was noted that with efforts such as the state/federal/local/private I-Team collaboration initiatives, we are pursuing an approach and vision which presumes extensive levels of ongoing geospatial data sharing and mechanisms to facilitate easy access to the data maintained by multiple agencies. Individuals and entities with widely varying levels of expertise and located globally will be seeking to access and use these datasets. It was noted that we need to develop an inventory on the data currently available through state/federal/local/private entities. It was noted that we need to look at how other states are approaching this common need. Tom Lamberson shared the model DEQ uses to maintain their dataset in-house, but to make it available to EPA to access that data in a real time format. Mark

Kuzila suggested that one of the real strengths we have going for us is the motivation of the staff people involved. The issues of maintaining access to data in time of crisis (i.e. lose of electricity, network, etc.) were raised as needing to be considered. Legal issues such as licensing, liability, and privacy were also raised and needing to be considered.

What Are the Next Steps. It was noted, that particularly given the current budget crisis, what we need is to develop a long-term strategy with workable short-term steps. The group agreed that as one of its first steps, it needed to gather some additional information. It identified two initiatives in this regard that hopefully Larry would be able to undertake prior to a next meeting.

1. Develop a draft survey to identify what Nebraska-related geospatial data currently exists and make that draft survey available to interested Advisory Committee members prior to the next meeting.
2. Gather information on the models that other states are using to address these same needs (organization structure, range of services, staffing, budget, etc.)

Next Meeting Rescheduled. It was decided to meeting again in a month at 9:00 AM on Friday, March 22nd. Unfortunately, since that meeting Larry Zink has discovered that he has to fly out to a meeting earlier than he thought and so will not be available on the morning of March 22nd. Therefore the meeting has been rescheduled for **March 29th, 9-11:00 AM at the NDNR conference room in the Nebraska State Office Bldg.**